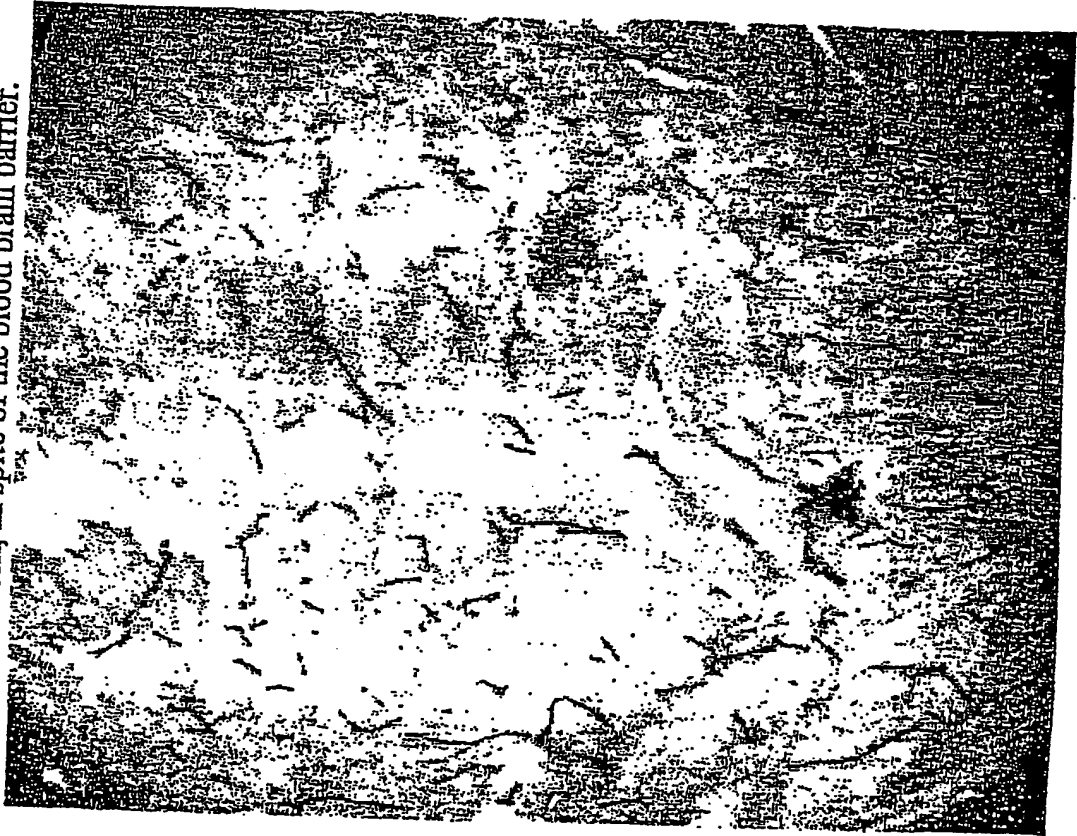


Figure 1

Capillaries of the human brain express very high levels of EPO receptor, as determined by immunohistochemistry using specific anti-EPO receptor antibodies. This provides a mechanism whereby

EPO is able to penetrate into the brain from the systemic circulation, in spite of the blood brain barrier.



EPO receptor is densely localized within and around capillaries forming the blood brain barrier in the human brain



Figure 2

High density of EPO receptor is at the luminal and anti-luminal surfaces of human brain capillaries, forming the anatomical basis for transport of EPO from the circulation into the brain.

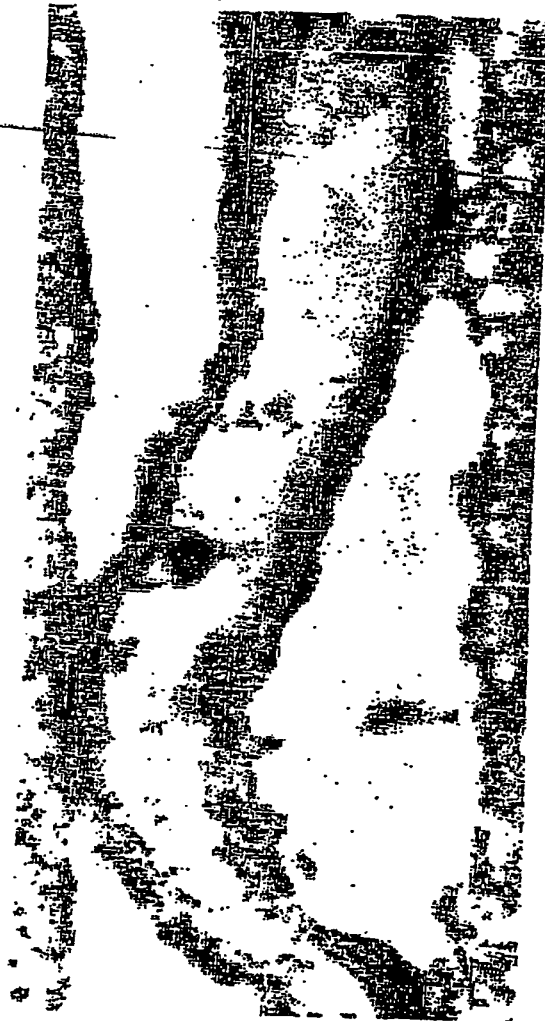


Figure 3

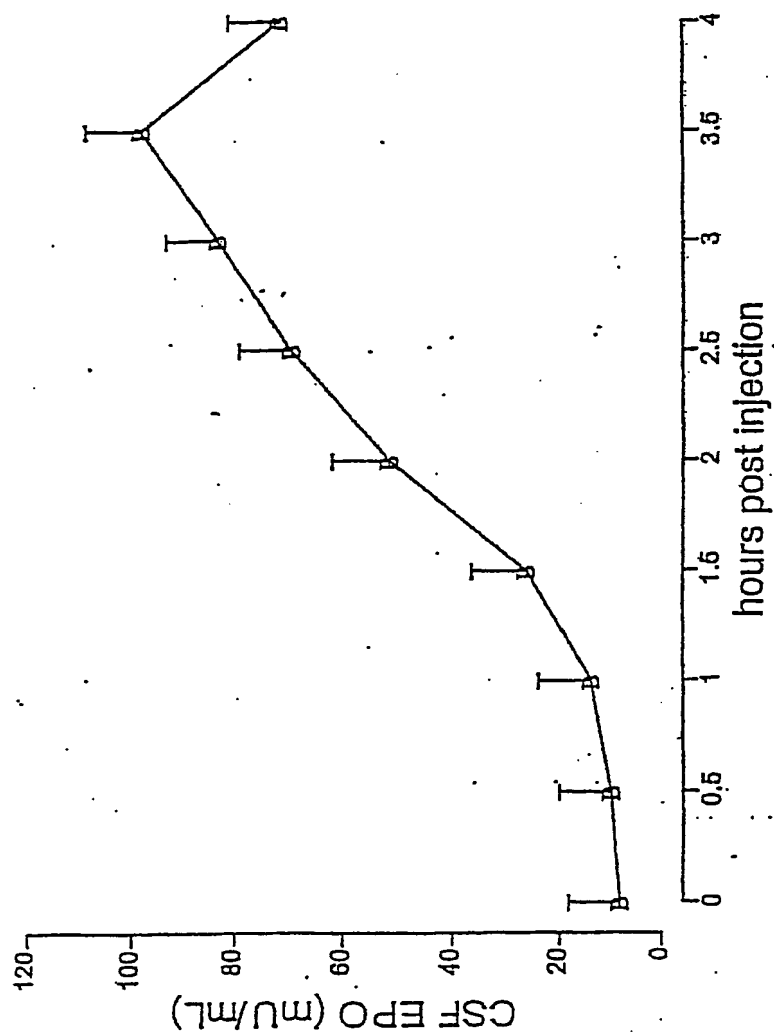
EPO receptor is found upon the endothelial surface (\*), within cytoplasmic vesicles (arrows) and upon glial endfeet (+) in human brain, providing the anatomical basis for transport of EPO from within the circulation into the brain.

.....  
A158-1141.E  
93F2.112510



Figure 4

Figure 5

RAT CSF EPO CONCENTRATION AFTER PARENTERAL rH-EPO  
ADMINISTRATION (5000 U/kg-bw I.P.)2.5 hrs and longer  $p < 0.01$  compared to baseline

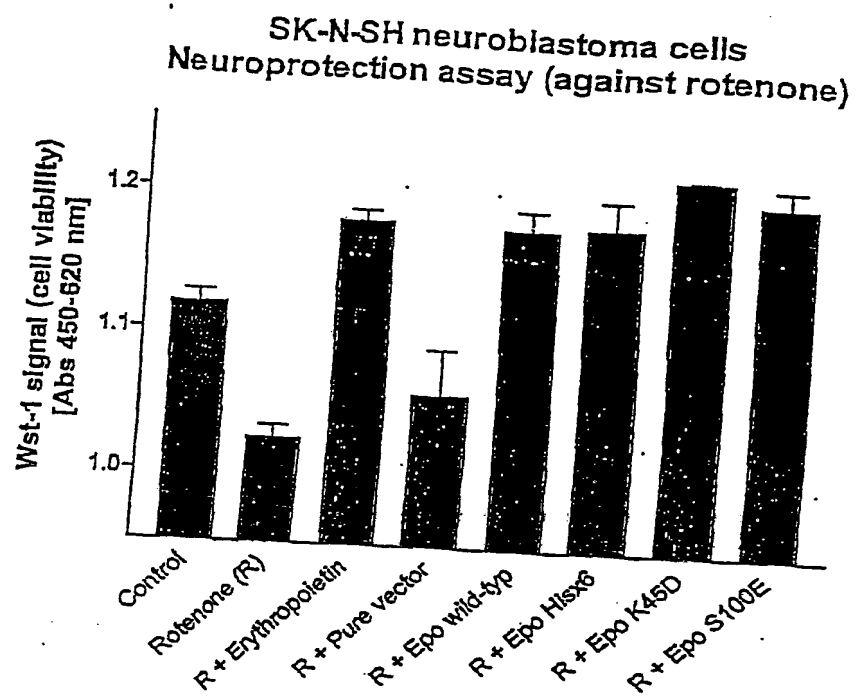


Figure 6A

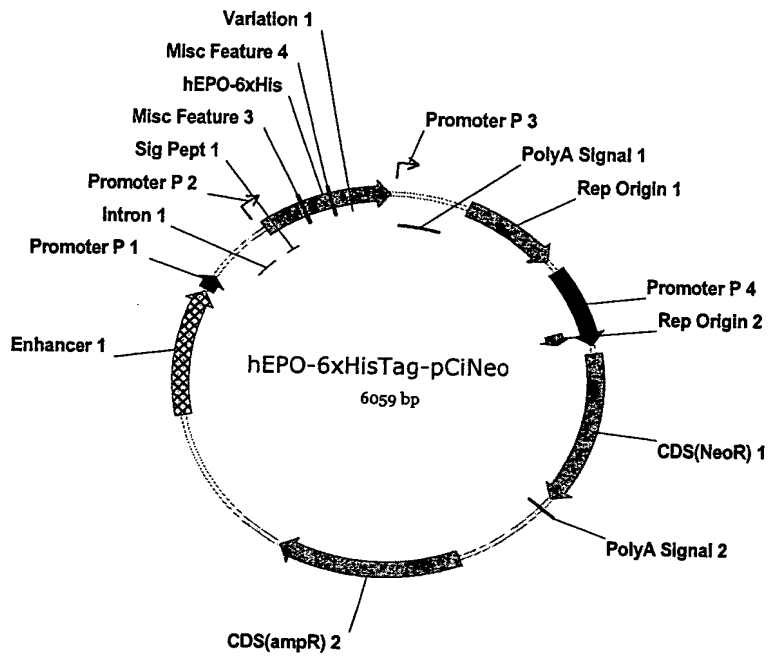
**Figure 6B**

Figure 7

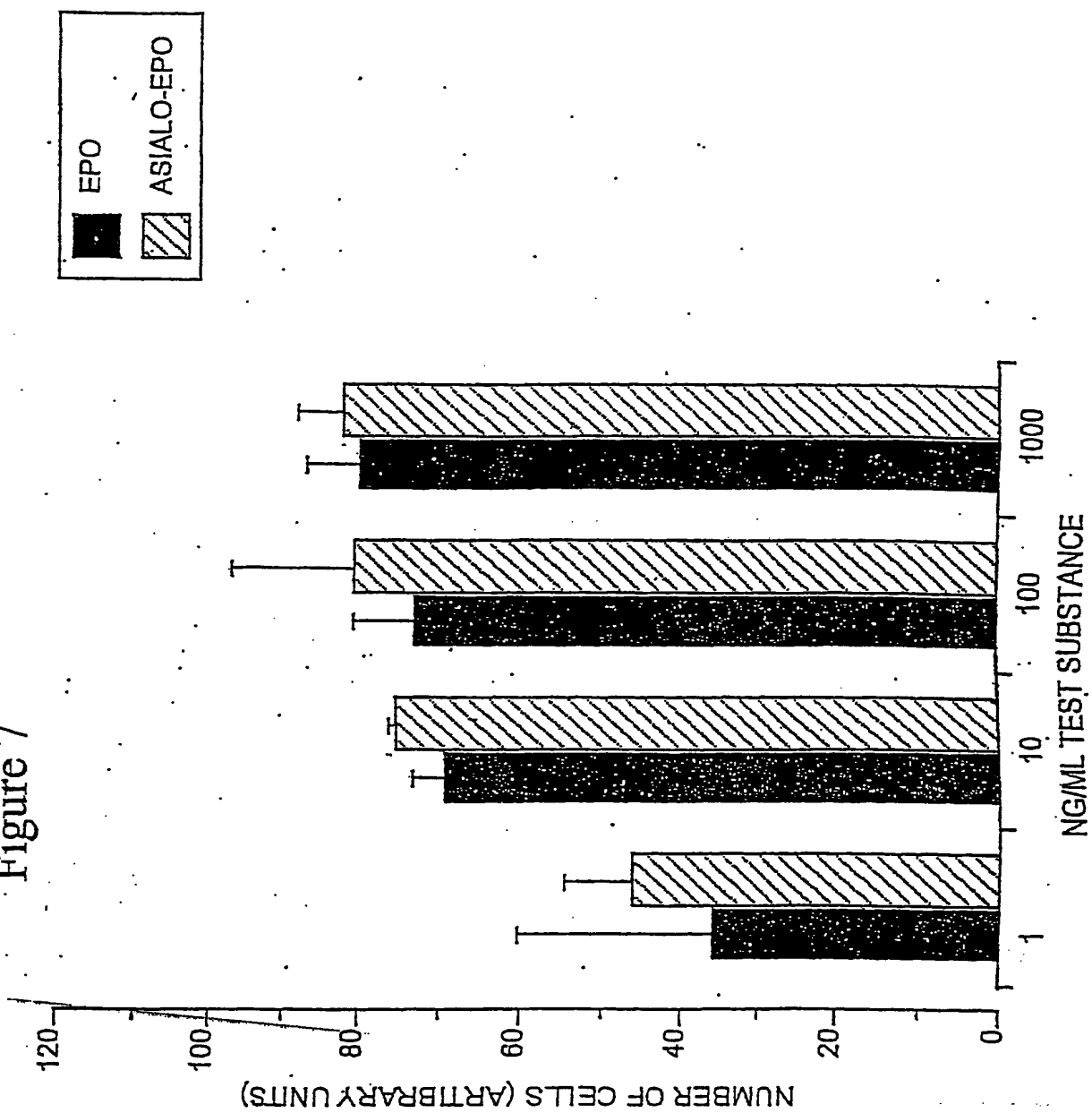




Figure 8

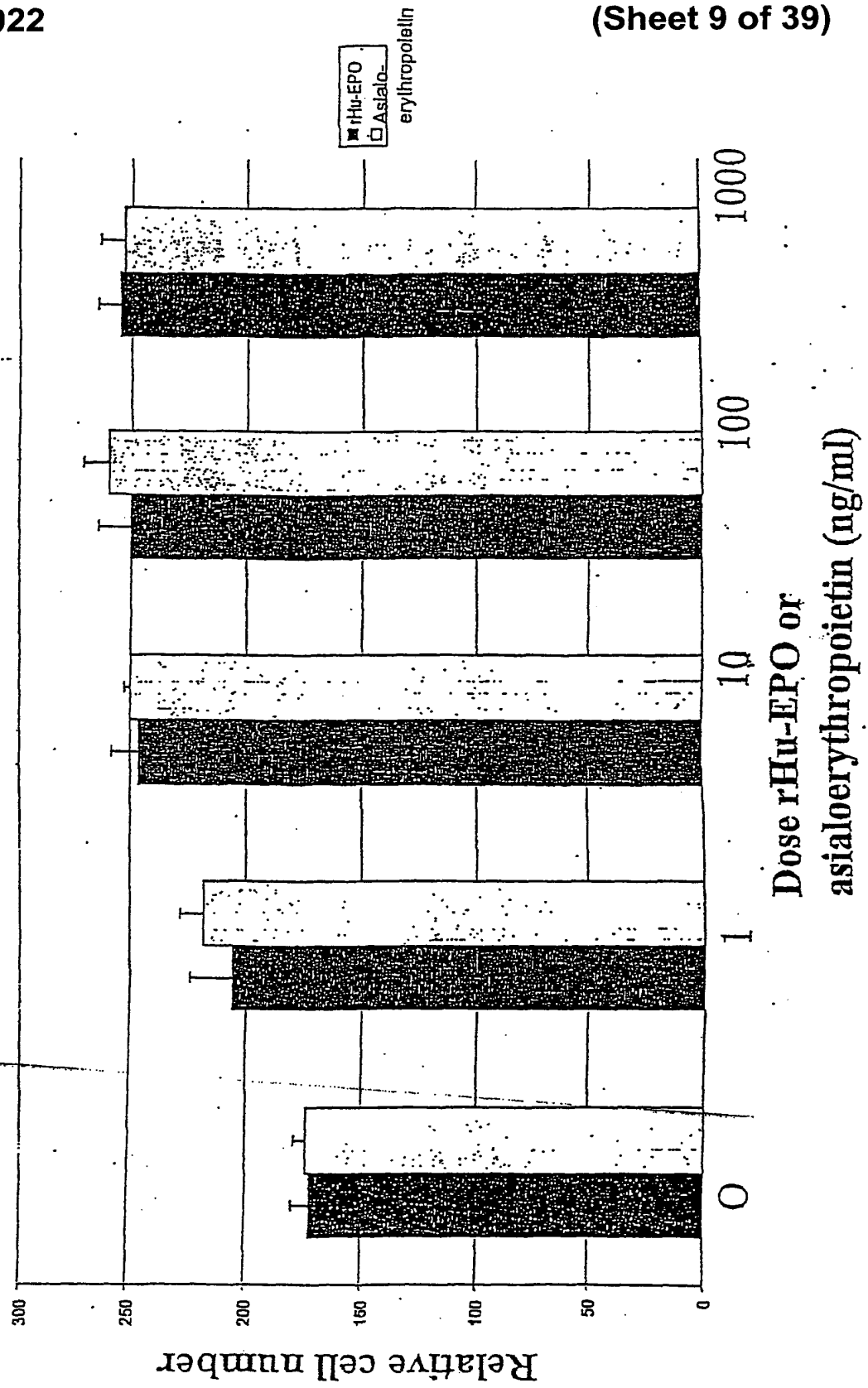


Figure 9

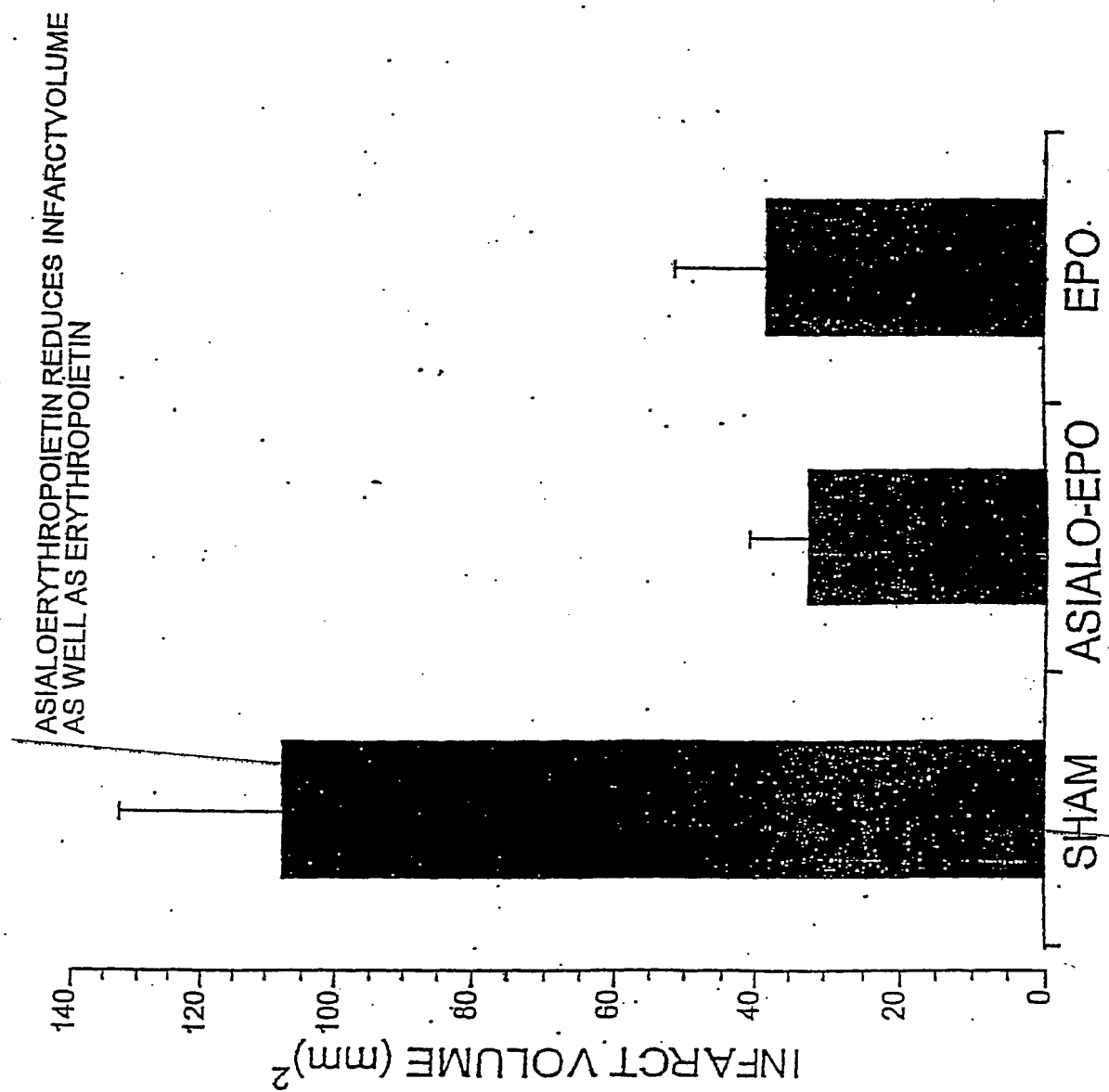
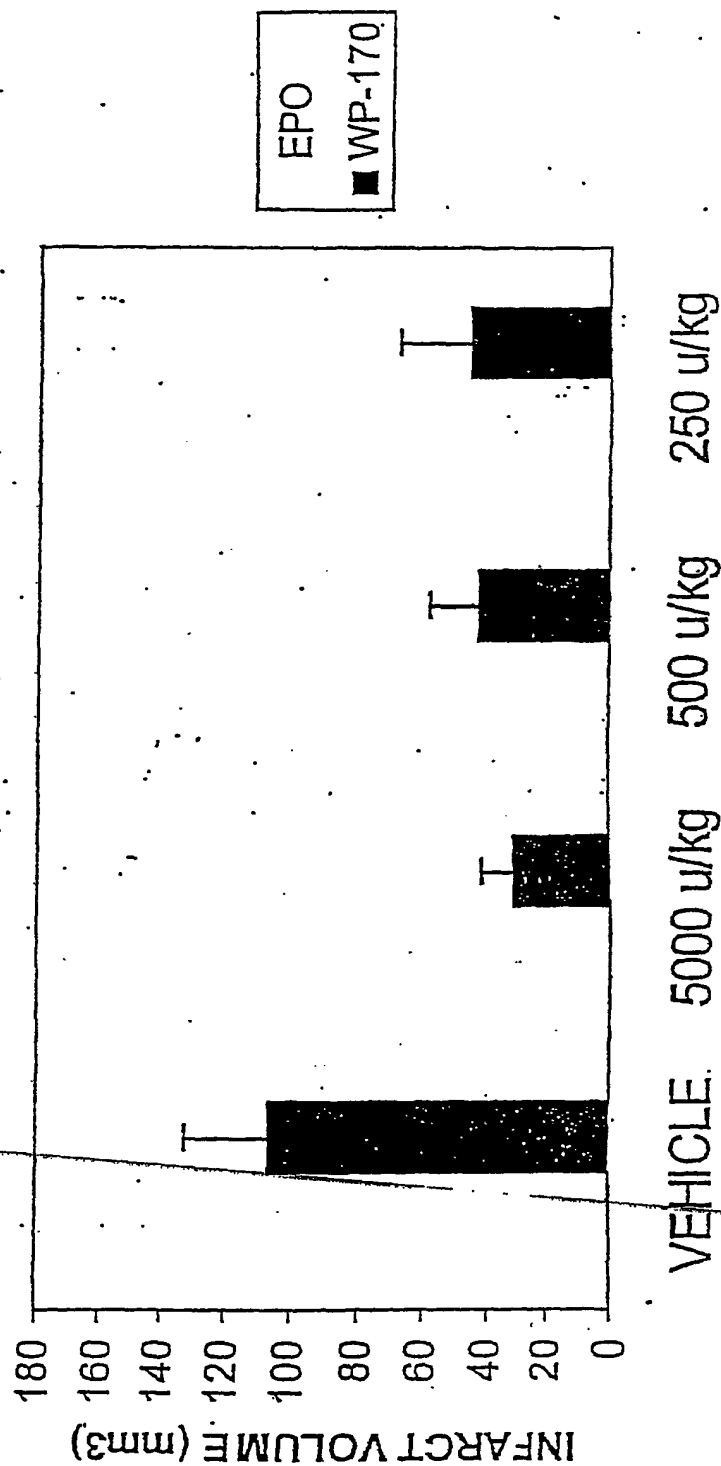


Figure 10

# asialoerythropoietin (dose response)



n for each group is greater than or equal to 4

Figure 11

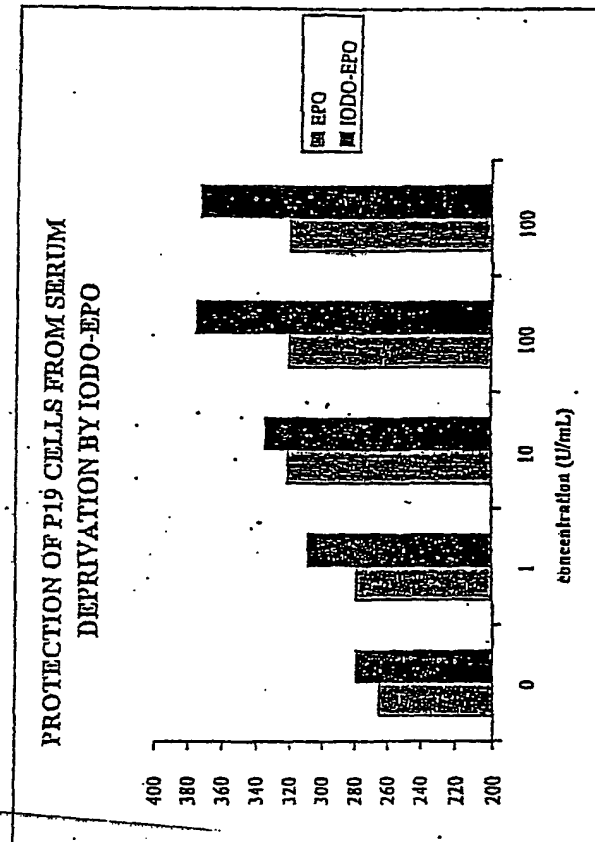


Figure 12

Biotinylated-EPO and Asialo-EPO retain activity in P19 assay

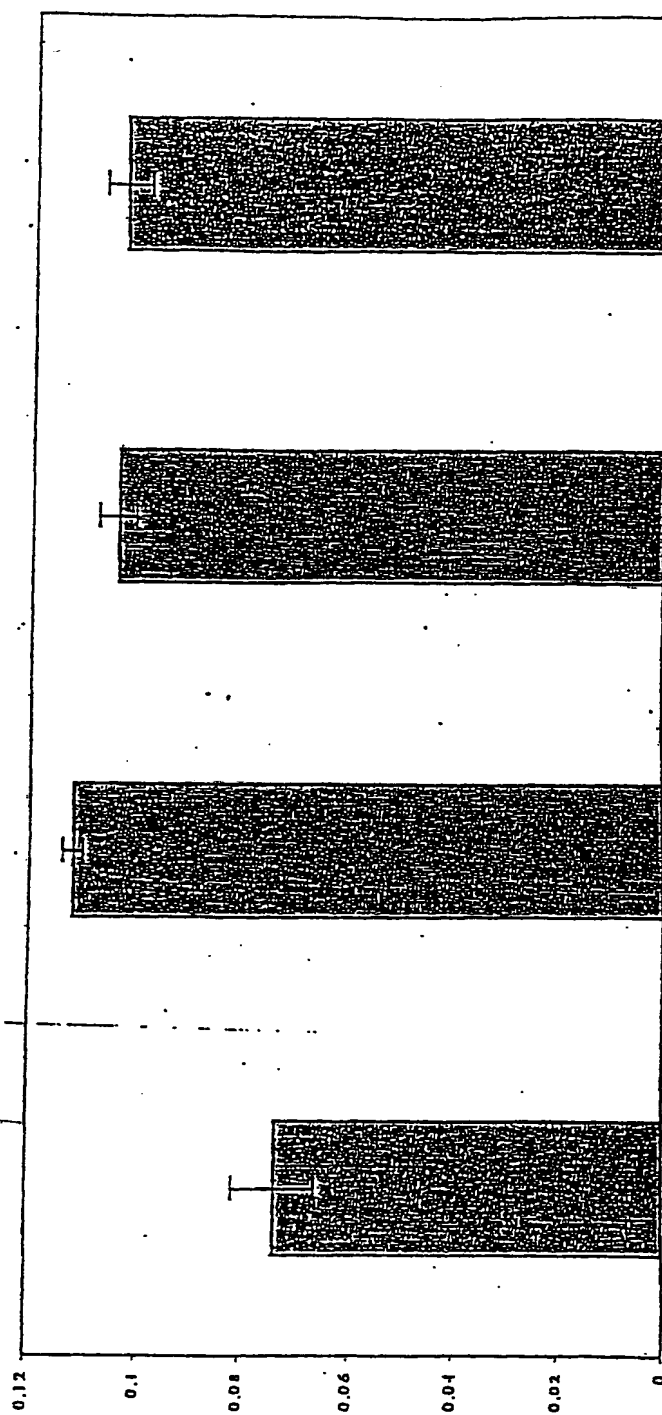


Figure 13

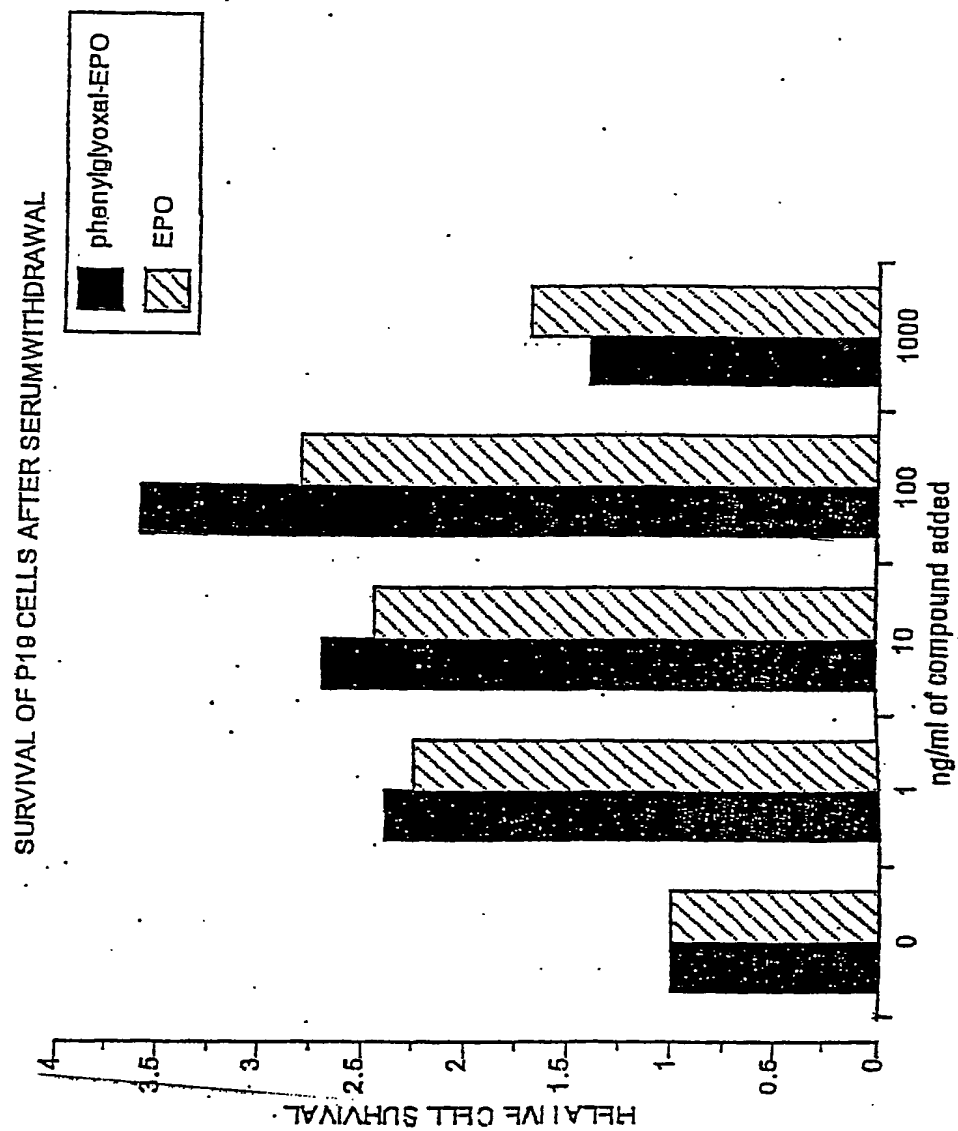


Figure 14

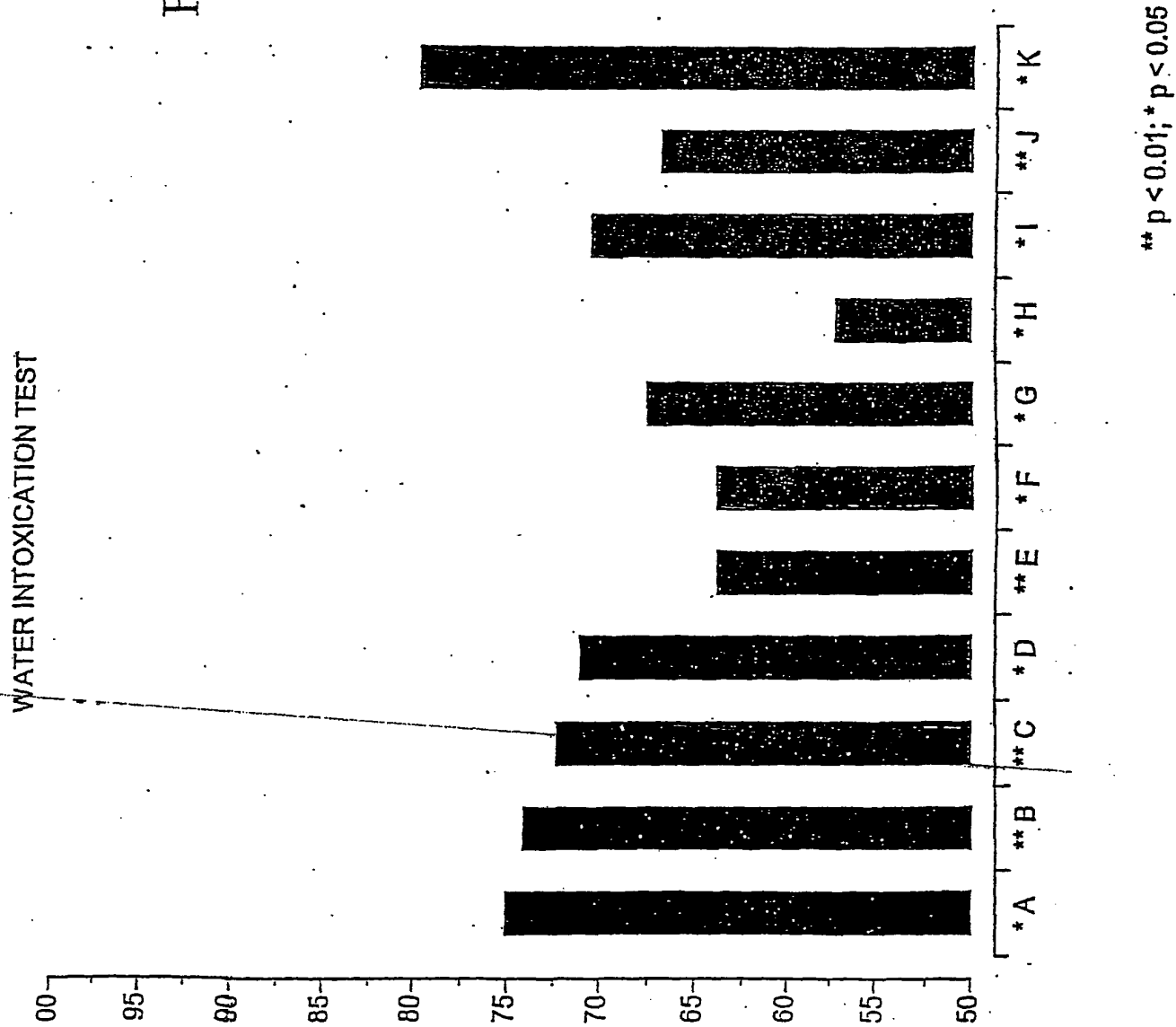


Figure 15

Erythropoietin improves cardiac function in  
a heart isolated for transplantation

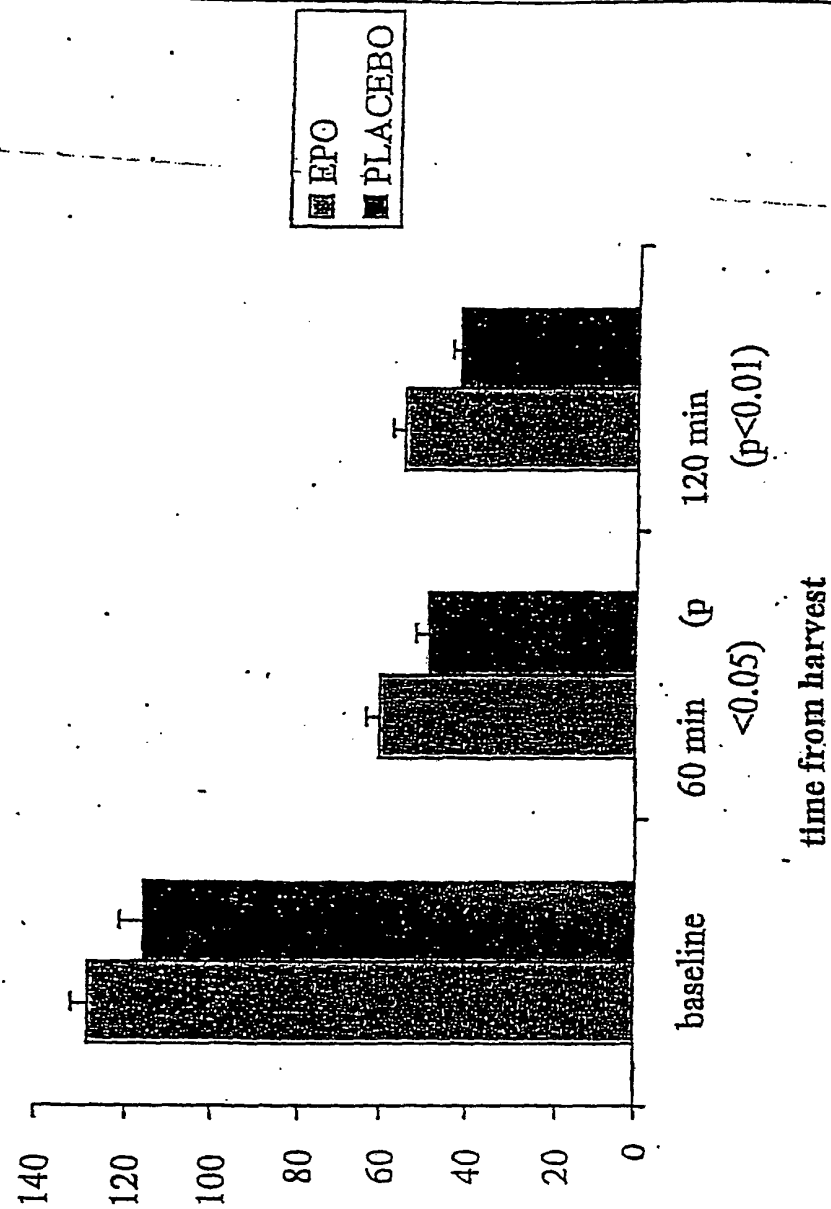




Figure 16

RAT HEART 7 DAYS AFTER 30 MINUTES OF ISCHEMIA

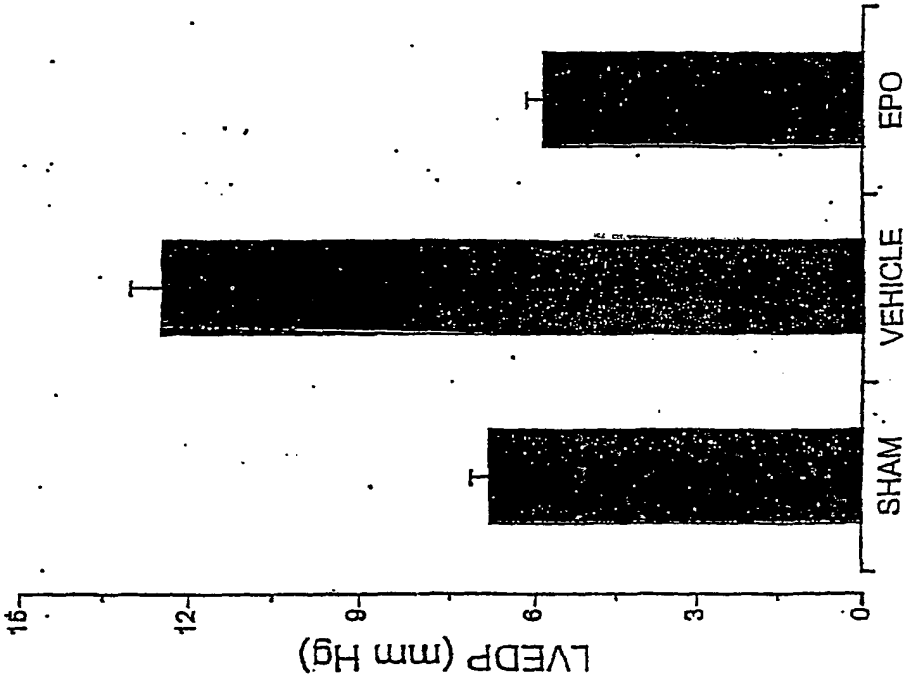


Figure 17

Electroretinograms from rats subjected to 60 minutes of ischemia

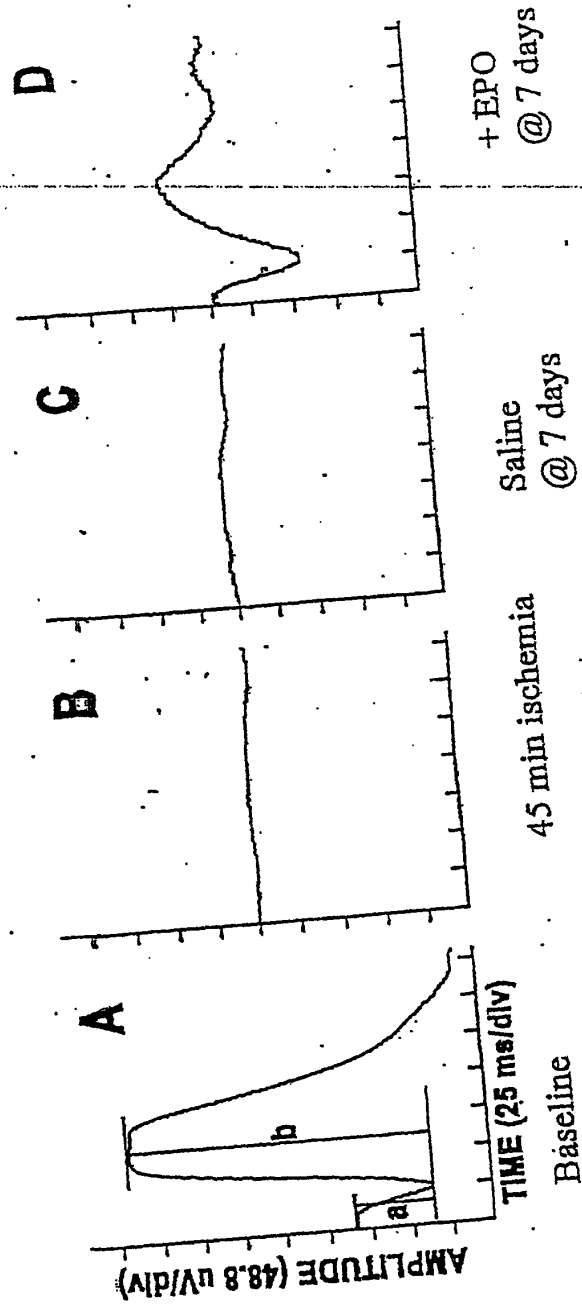
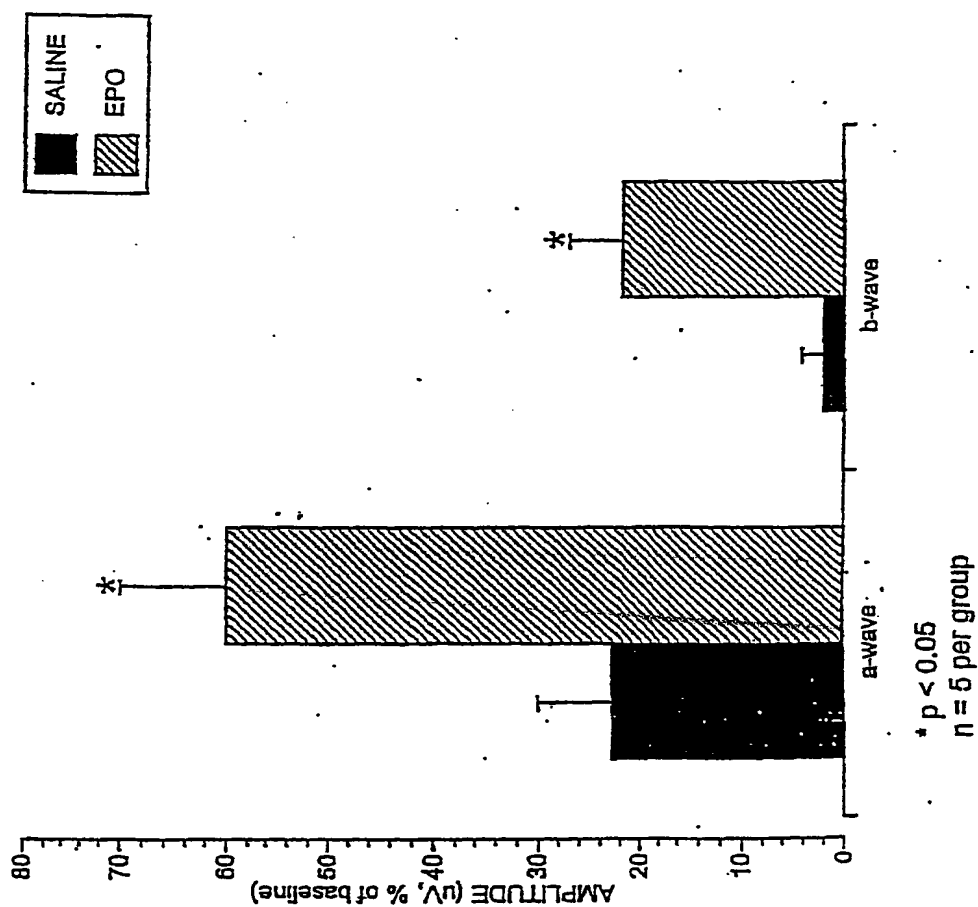


Figure 18

Retinogram amplitude after 60 min. ischemia



10165-022

Figure 19

Morris water maze; female Balb/c mice n=16. Blunt brain trauma with EPO rx beginning on day 5 after injury. First water maze test began 1 week after EPO dosing began (12 days after injury). Both groups of animals did poorly with swim times ~80 out of 90 seconds possible. Negative values indicates that EPO is better. Means of 4 trials per day.

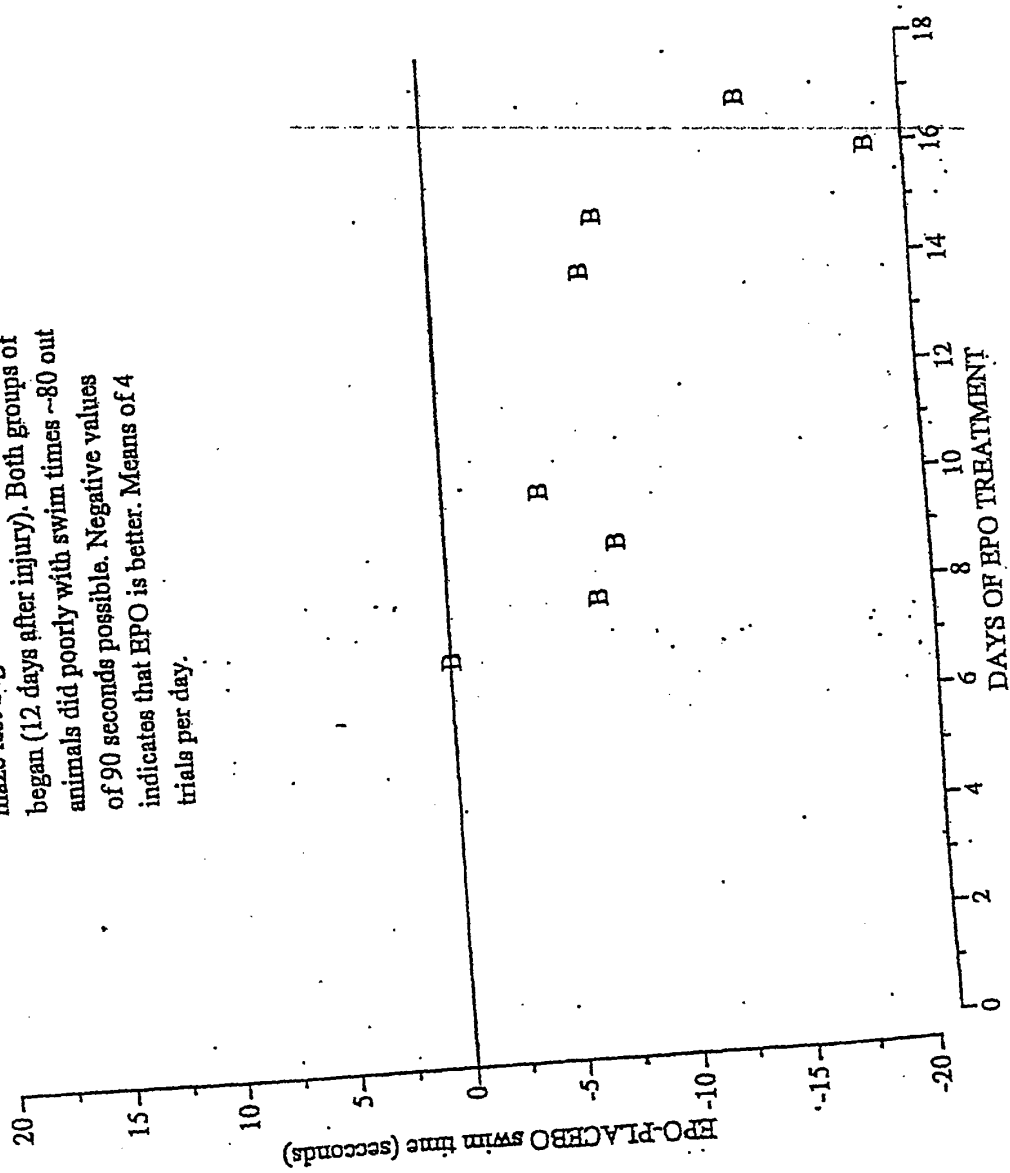


Figure 20

Differences in swimming time to platform in  
Morris water maze.  
Bab/c mice; brain trauma 1 month  
previously, treated with 5000U/kg EPO daily  
except weekends  
beginning one month after injury  
(n=7 each group)  
means of 4 trials each day

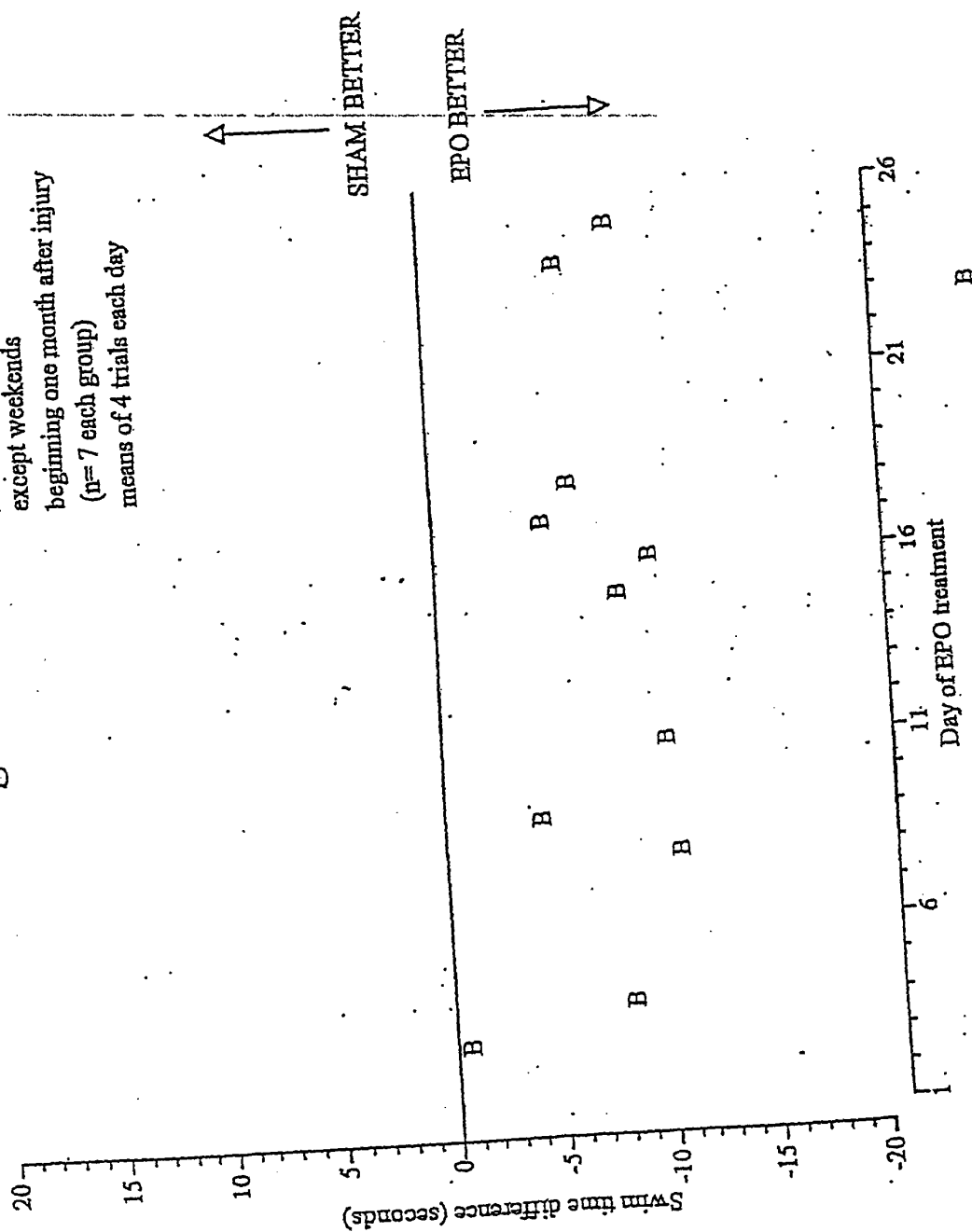
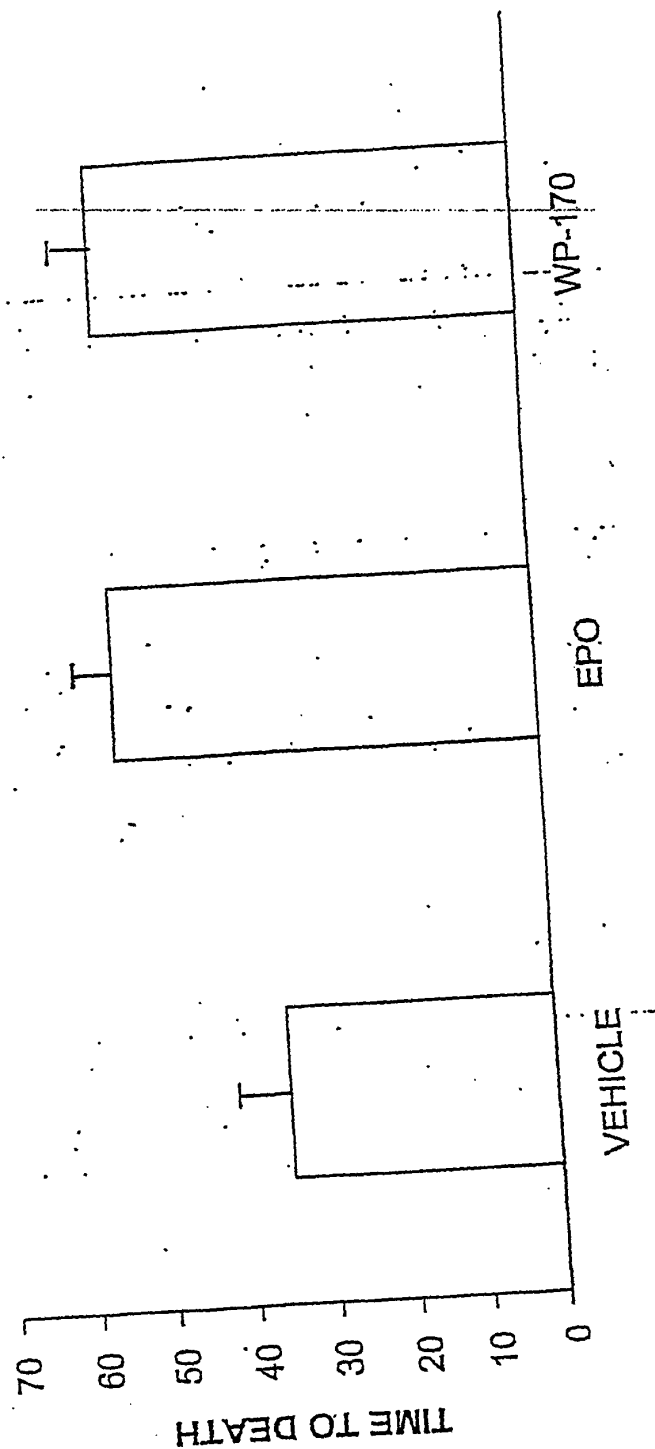


Figure 21

## Kainate model



RAT SPINAL CORD COMPRESSION MODEL

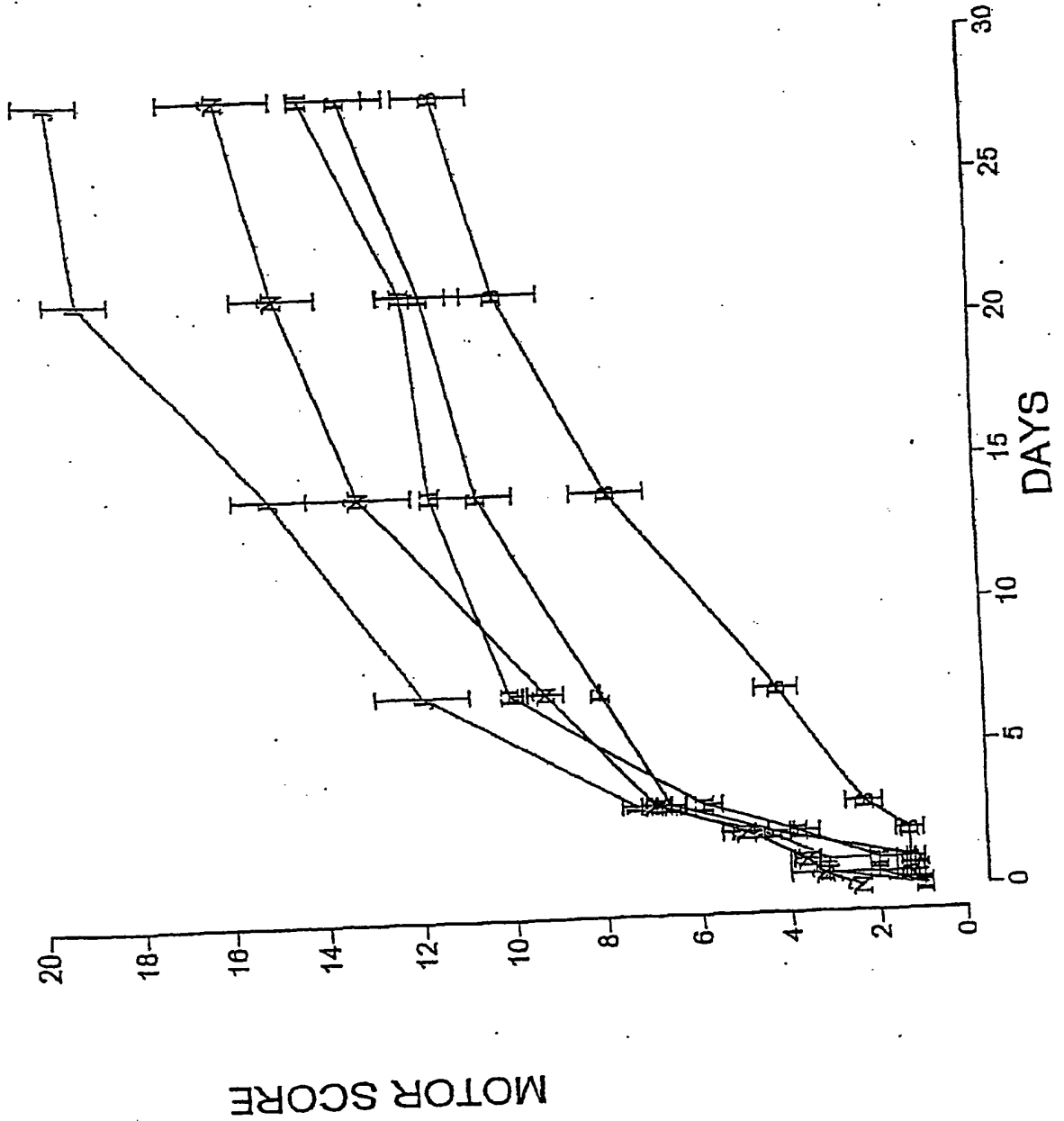
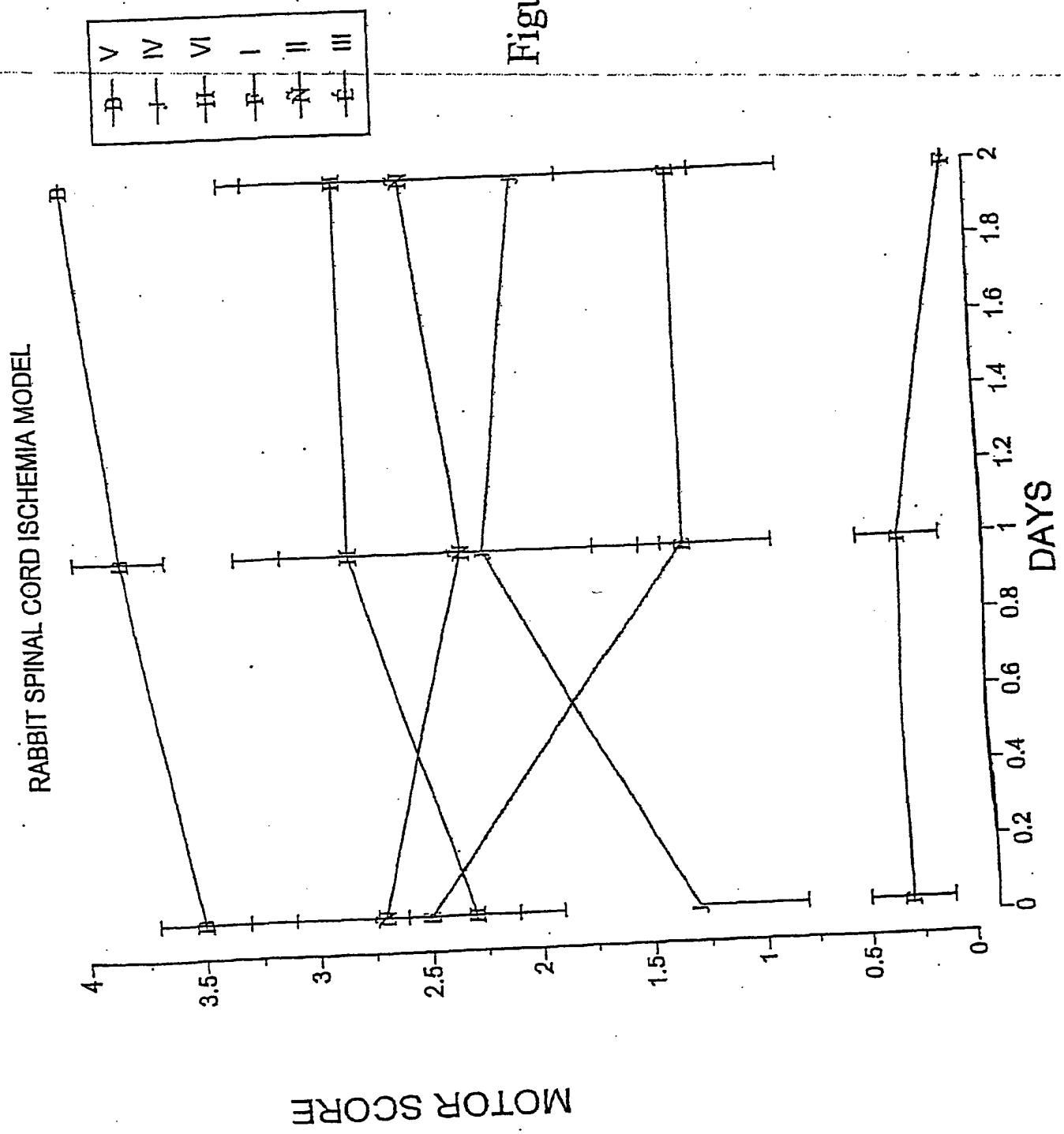


Figure 22

I	II	III	IV	V

Figure 23





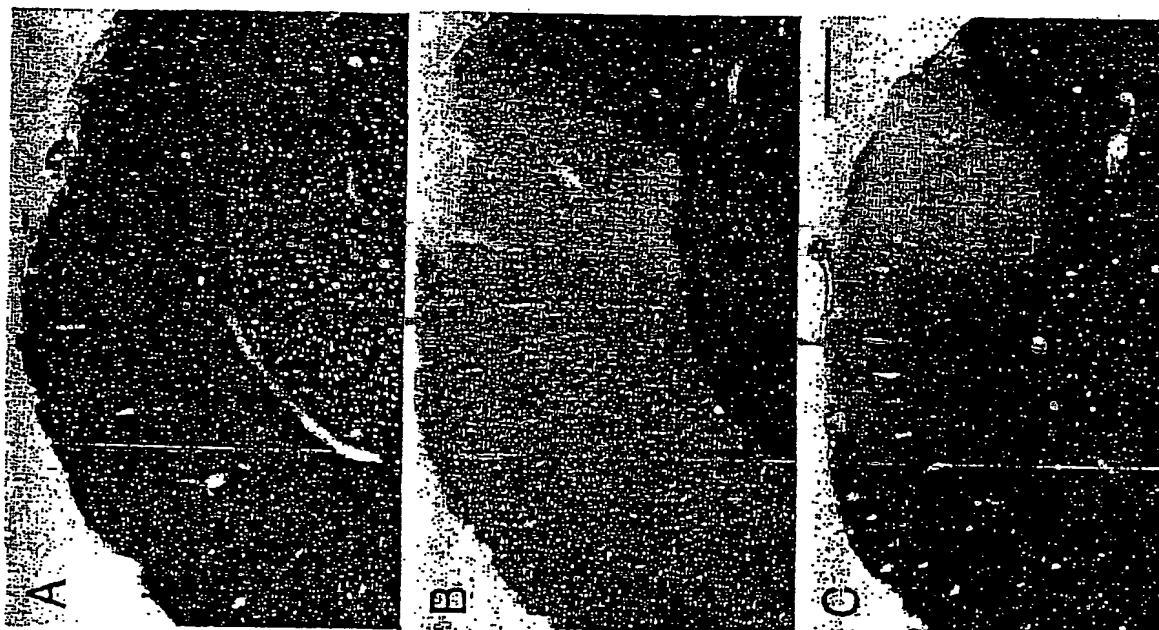


Figure 24

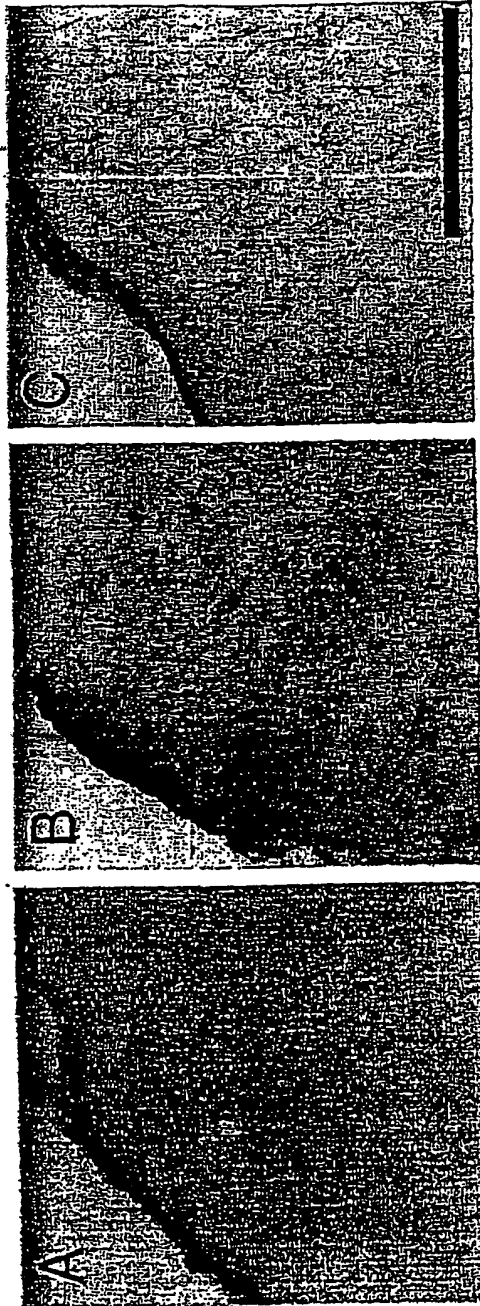


Figure 25

Figure 26

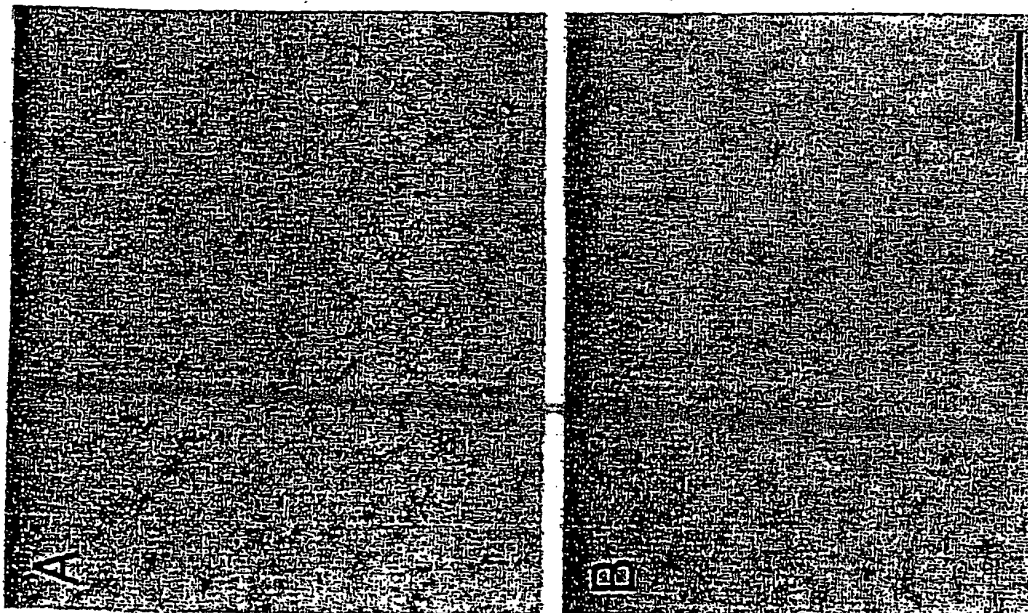
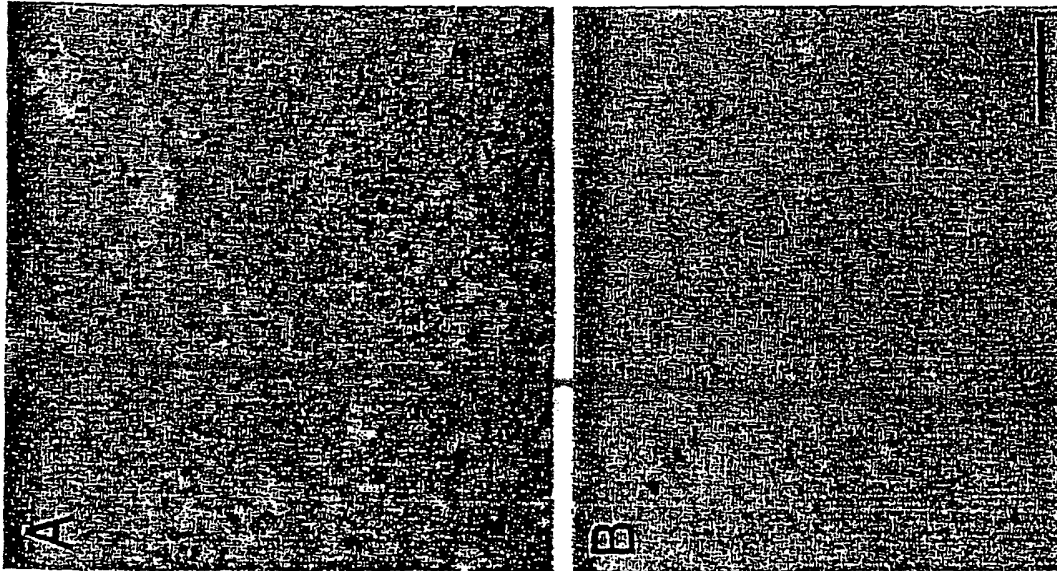


Figure 27



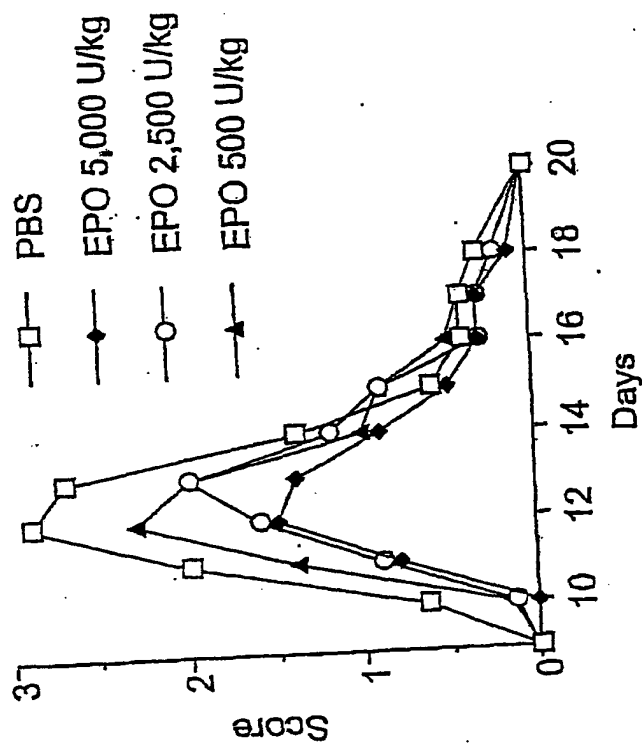
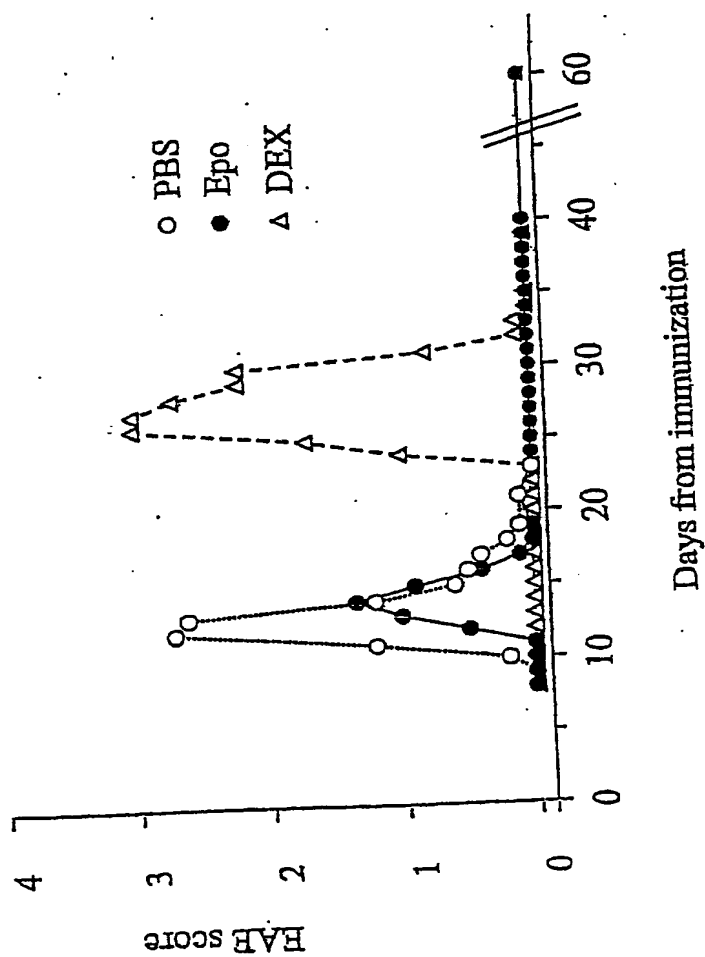


Figure 28

Figure 29



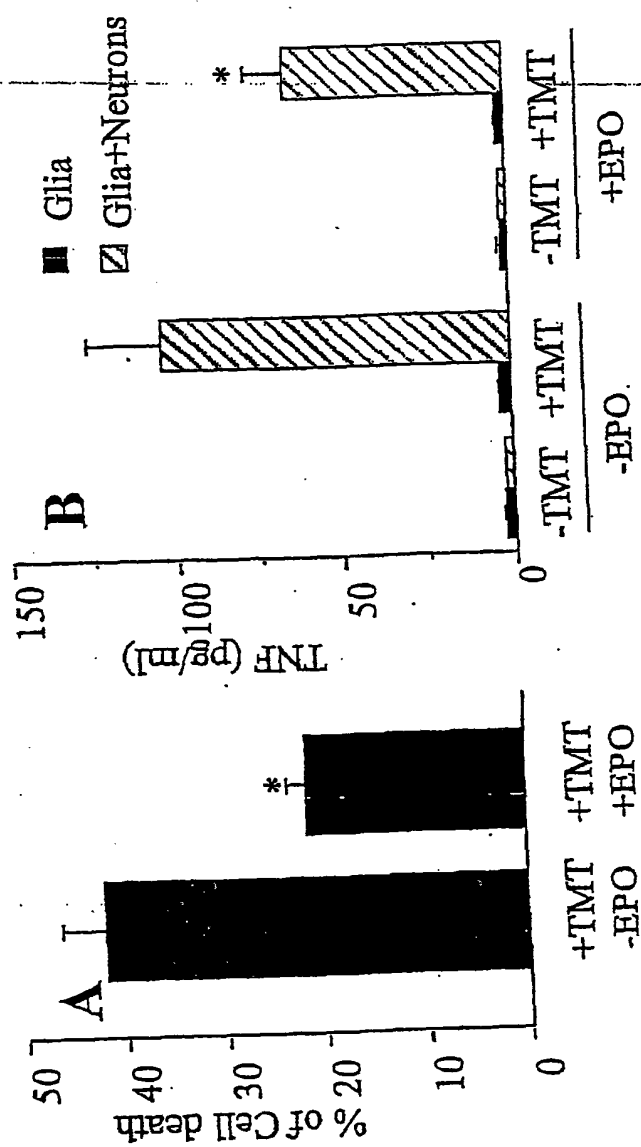


Figure 30

NMDA induced cell death in  
primary hippocampal neurons  
compounds at 5nM

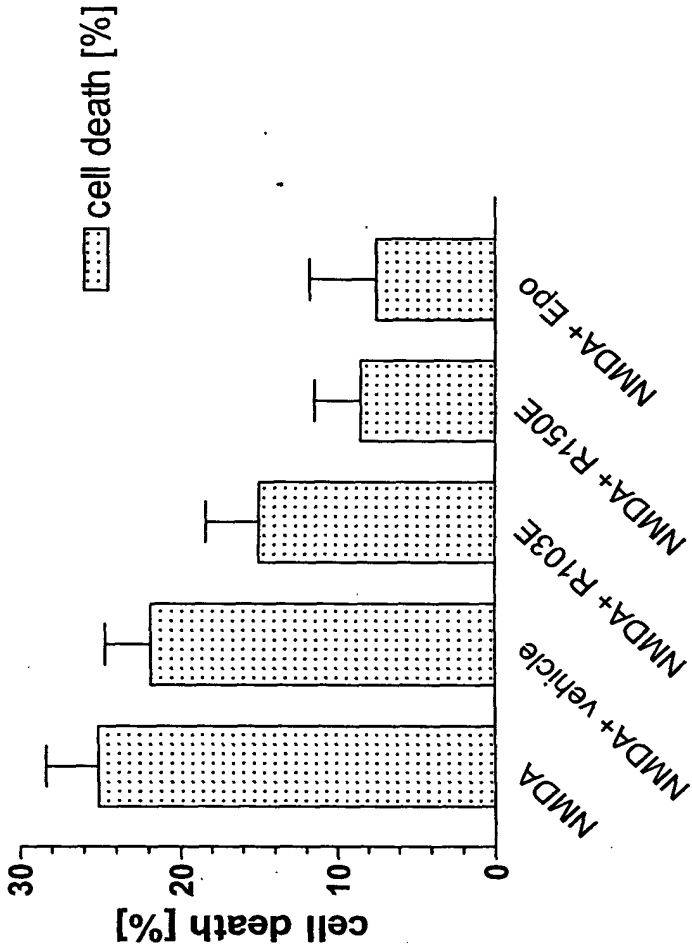


Figure 31



neuronal protection from  
serum withdrawal in P19 cells

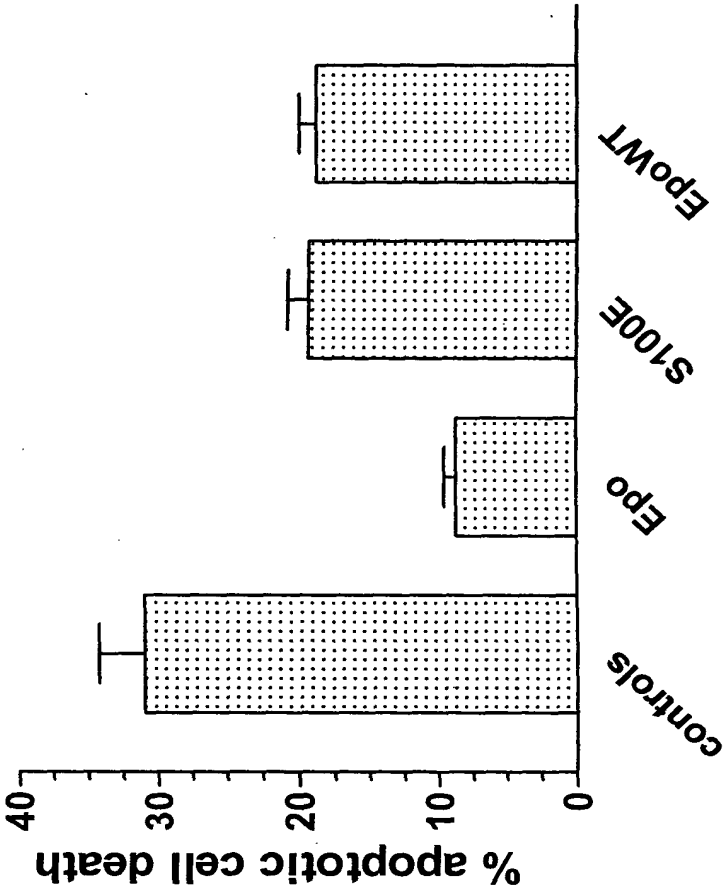
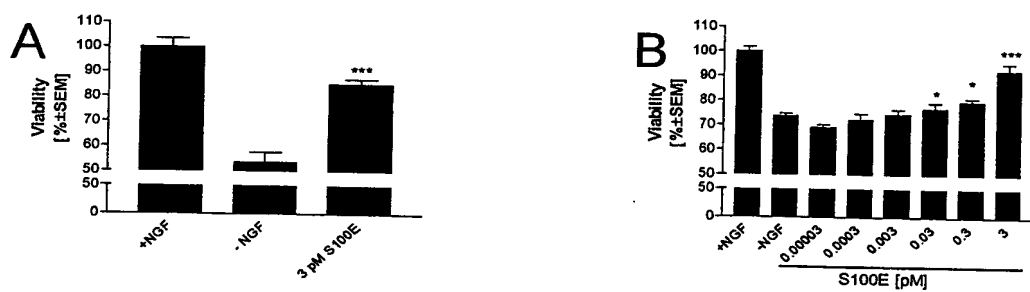


Figure 32

Figure 33



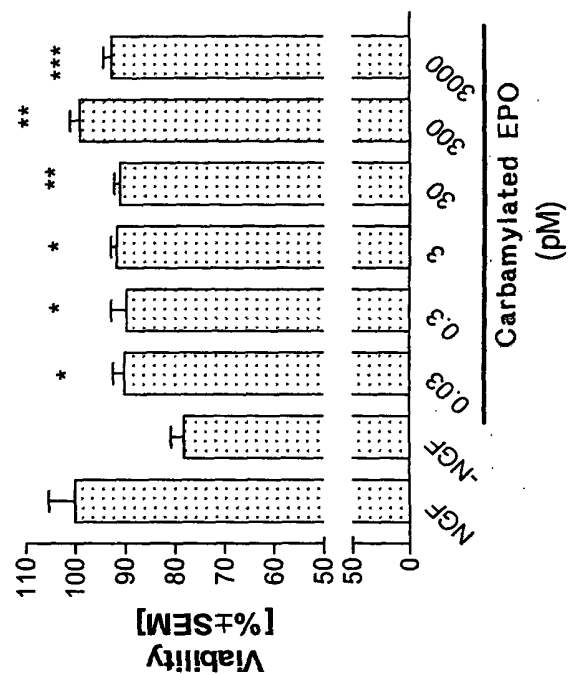
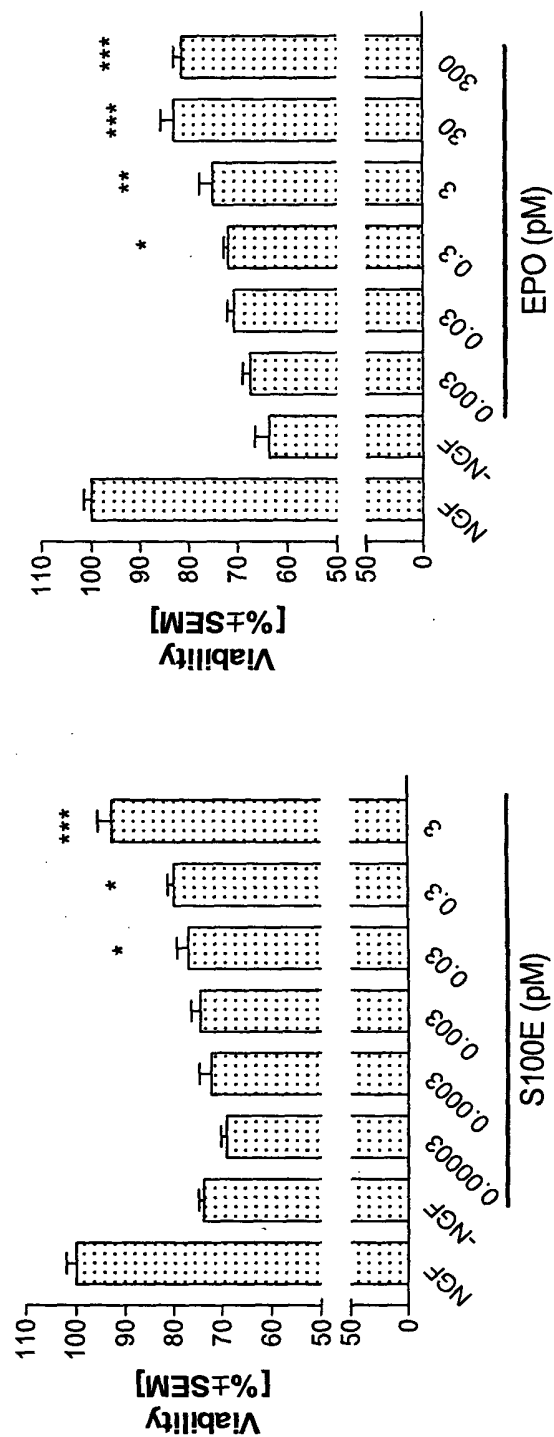


Figure 34

UT7 bioassay  
Epo mutants

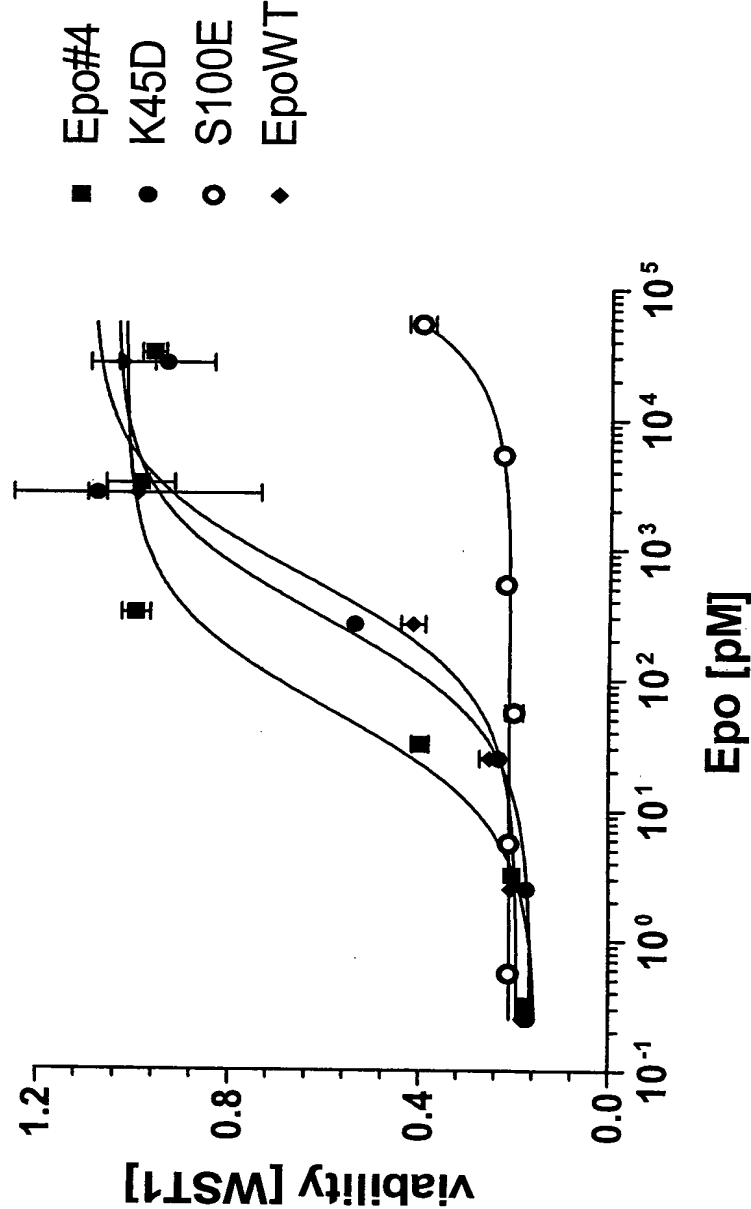


Figure 35

UT7 bioassay  
Epo mutants

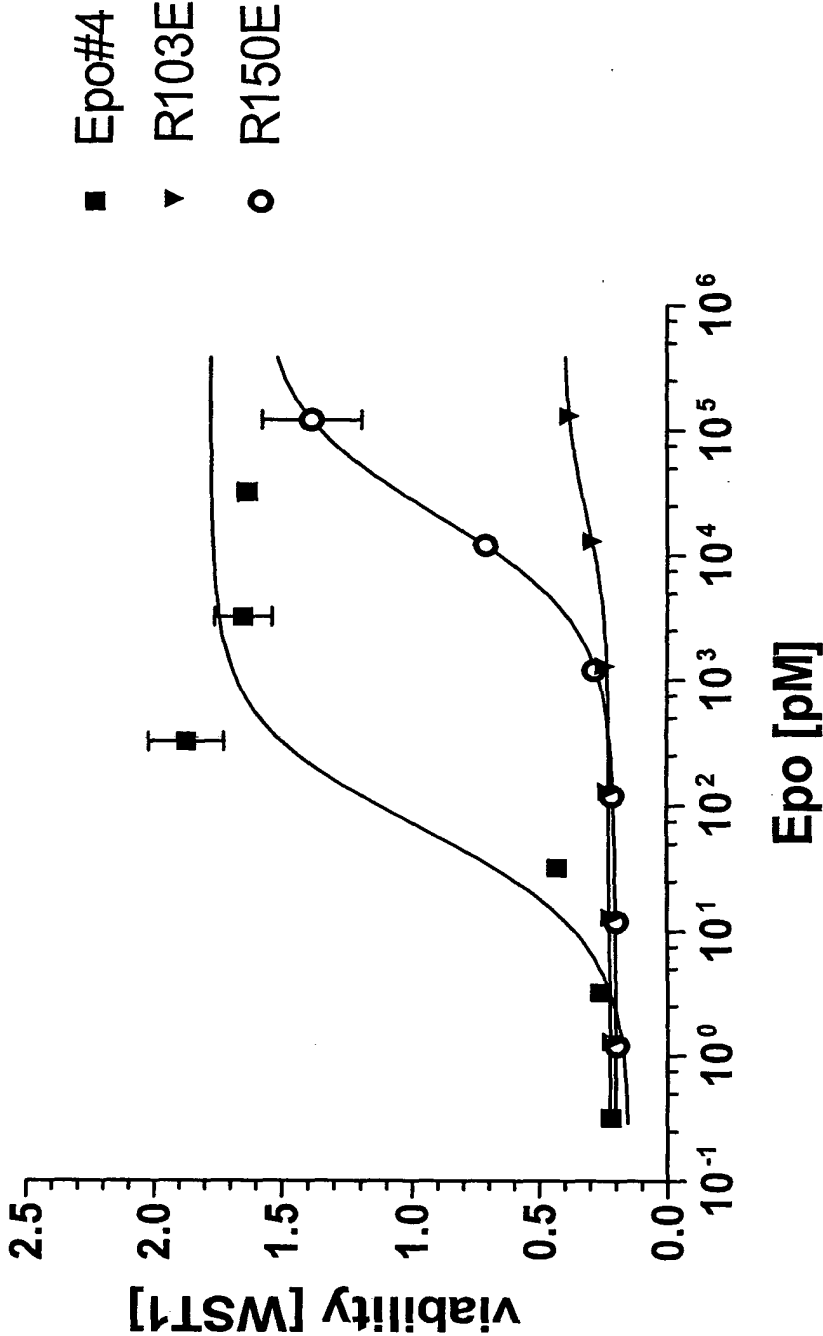


Figure 36

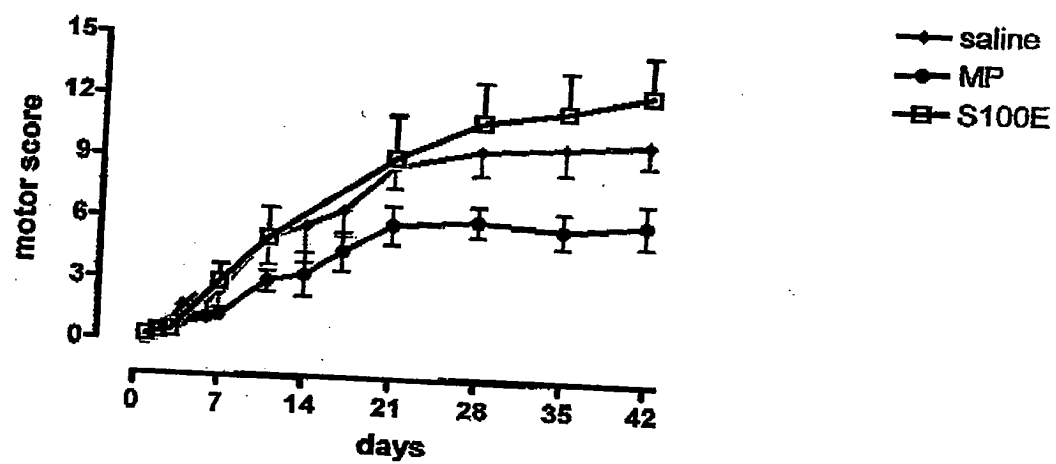
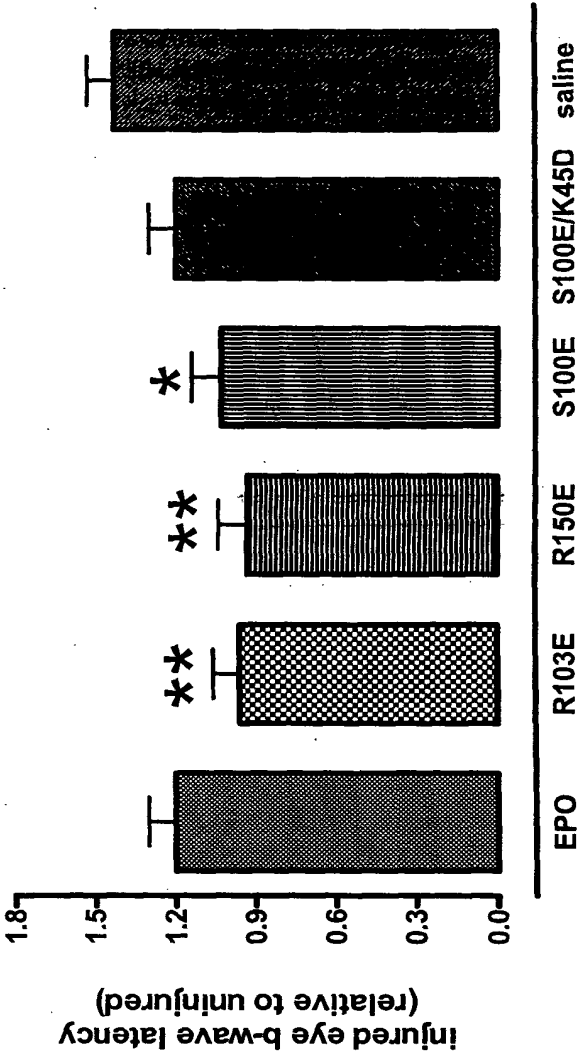


Figure 37



\*\* p<0.01; \* p< 0.05 versus saline

Figure 38